

Marine Corps Systems Command Report to Industry

4 October 2007



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Marine Corps Systems Command

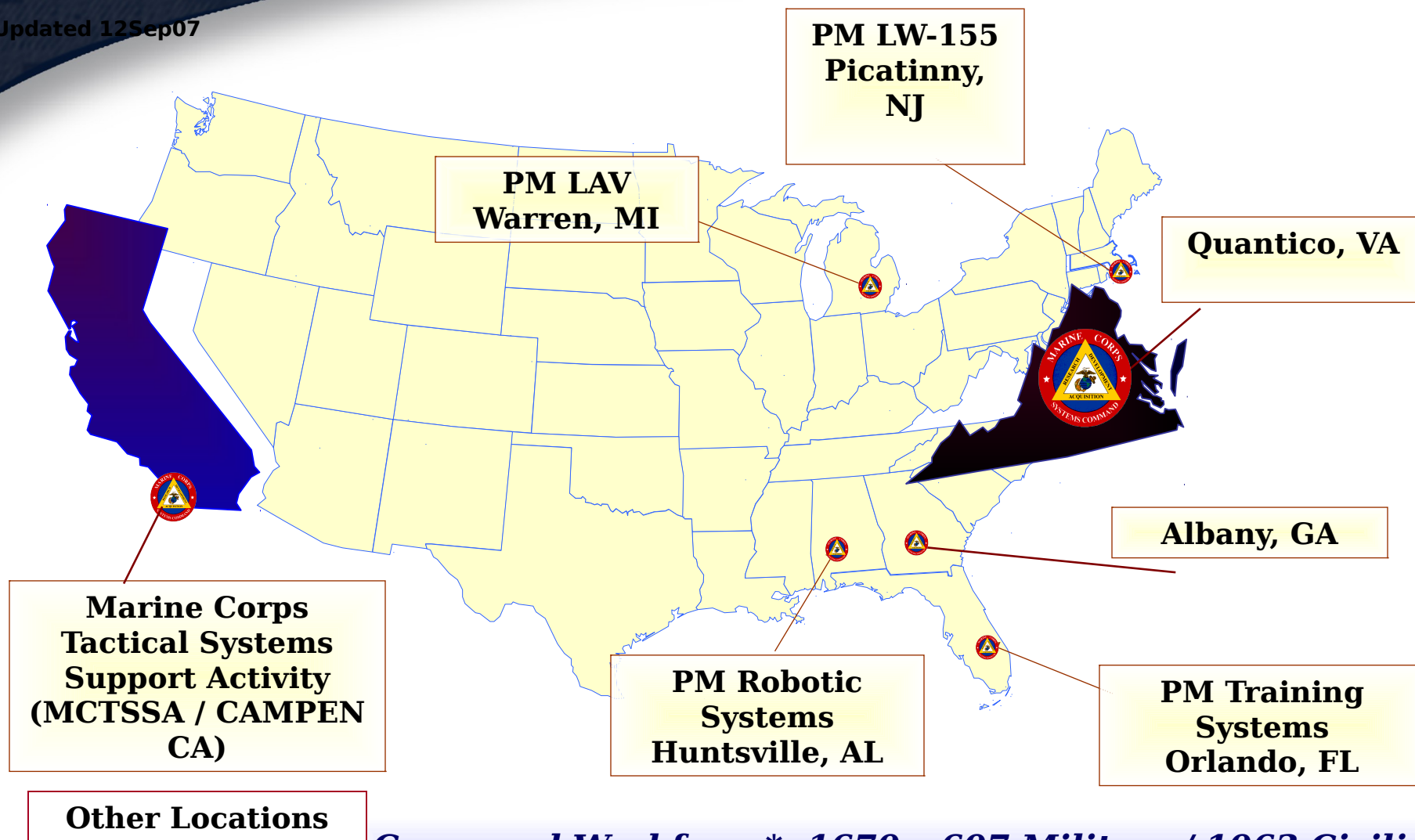


Mission:

To serve as the Commandant's principal agent for acquisition and sustainment of systems and equipment used by the Operating Forces to accomplish their warfighting mission.



Updated 12Sep07



Command Workforce*: 1670 - 607 Military / 1063 Civilian
*** Navy Interns Included**



Major Muscle Movements:

- Ongoing Combat Operations
- Grow-the-Force
- Reset-the-Force
- Modernization/Recapitalization



The Needs of the Force:

- Lighten the Load
- Wheeled Tactical Mobility
- Hearing Conservation
- C2 and Tactical Networks
- ISR



Credibility:

- Can you do it?
Yes
- How long will it take?
How long do you have?
- How much will it cost?
How much do you have?



Accurate Portrayal of:

- Cost
- Schedule
- Performance
- Systems Engineering



Questions?



Back-up Slides



Major Muscle Movements:

- **Ongoing Combat Operations**

- Urgent Universal Needs Statements
- Reliance on Supplemental/GWOT Allowance
- Focus of Main Effort

- **Grow- the- Force**

- Personnel
- Equipment
- Facilities

- **Reset-the-force**

- Depot Repair
- Replace

- **Modernization/Recapitalization**

- Amphibious/Forcible Entry Ops
- Force-in-Readiness
- Spectrum of Combat
- AFRICOM



Lighten-the-Load:

• **Personal Protective Equipment**

- Helmet

- Body Armor

 - Ballistic Penetration Protection

 - Blunt Force Trauma

• **Transfer the Load**

- Mule

- DARPA Big Dog

• **Tactics, Techniques & Procedures**

- Distributed Operations (DO)

- Hunter Warrior

 - >Fused I2, IR, UV, visible

 - >Through wall

• **Battery Commonality**

• **Systems**

Engineering/Integration

- >Treat rifle squads as a system

- >Target Acquisition (Day/Night)

- >Target designation (white light, IR, and laser)

- >Helmet (protection, comm., SA, night vision)

 - >CRADA

 - >IRAD



Wheeled Tactical Mobility:

• **MRAP & MRAP II**

- Improved Protection

 - >Blast

 - >Acceleration

 - >Penetration

-**SIRALS**

 - >Seats: Best of Breed

 - >Power: 600 amps and up

 - >Armor Improvements

- MPC

- JLTV

 - >Back to Milestone A

 - >Competitive
Prototyping

 - >Challenging
Survivability
Requirements

 - >Technology Maturity

- ITV



Hearing Conservation:

- Sound Suppression/Noise Reduction
 - > Steady State
 - > Impulse
- Greater than 30 db reduction
- Compatible with helmets
- Allow Communication
- Reduce noise environment below OSHA mandated level of 86 db in high noise environments
 - > EFV
 - > Flight Deck



C2 & Tactical Networks:

- Converge with Army C2 Systems-Joint
- Self-Forming & Self-Healing Networks
- C2 On-the-Move
- Combat ID/IFF
- COC to CAC2S to MAFTF C2
 - > Hardware
 - > Software
 - > Architecture
 - > Shelters
 - Power
 - Environment



ISR:

- Real Time/Near Real Time
- Open, Closed & Complex Terrain
- Actionable, Integrated, Distributed
- Sense through walls
- Detect
 - Presence of:
 - > People
 - > Explosives
 - > Chemical & Biological Agents
 - > Changes in Density
 - > Disturbed earth



Lighten the Load:

- Call attention to NRC Summer Study - Need ingenuity get load down to 50-60 lbs
- PPE reduce weight & bulkiness while increasing protection and comfort of the helmet and body armor.
- Transfer the load - DARPA projects mules/big dogs. What can be moved from shoulders & backs of Marines but still travel with and be available to them?
- New operating concepts like DO & Hunter warrior improved sensors that face I2, IR, UV exploit electromagnetic spectrum eliminate duplication in a single sight
- Get number of batteries in an infantry platoon from Mark Richter. Drive to one, power dense lightweight, rechargeable common battery.
- Stop treating Infantry Squad like a Christmas Tree on which we hang ornaments. Focus Systems Engineering on integrating his load. Why three aiming devices for white light, laser pointer and I.R.? Need one that does all three. Partner with MERS integration Lab CRADA.



Wheeled Tactical Mobility:

MRAP & MRAP II – MPC, JLTV, ADM--MS “A” Competition Prototyping
understand what the human body can tolerate and design to provide
that: shock, acceleration; ITV --beyond EFSS



Hearing Conservation:

Sound Suppression to protect against both impulse & steady state. Beyond the 30 db we can get today with double (foam & maffs) Hidden cost of ear injuries. Protect the force.



C2 and Tactical Networks:

Converge with Army C2. Self-forming & healing networks, C2 on the move, combat ID/IFF progression from COC--CAC2S--MAGTF C2. All with increased demand for bandwidth, data storage, reach back and decision aids.



ISR:

ISR – Real-time and Near-Real-Time available to tactical units. Open closed and complex terrain provide actionable integrated intelligence (not just data) sense through walls detect presence of explosives & bio-chemical agents. Recognize disturbed earth changes in density (foam carbs)